

**Notice of Allowability**

Application No.

09/708,124

Applicant(s)

LEWIS ET AL.

Examiner

JAGDISH PATEL

Art Unit

3693

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/3/07.
2. ☒ The allowed claim(s) is/are 1,4-21,24-26,28 and 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 12/14/04; 9/7/07; 3/15/07.

### **DETAILED ACTION**

1. This communication is in response to amendment filed 7/3/07.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/3/07 has been entered.

#### ***Response to Amendment***

3. Independent claims 1, 24-26 and 30 have been amended.
4. Claims 1, 4-21, 24-26, 28 and 30 are pending. (See Examiner's Amendment below.)

### **EXAMINER'S AMENDMENT**

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Representative Julia A. Thomas Registration No.: 52,283 on 8/13/07.

*Please amend the Claims as follows:*

**Please cancel claim 22.**

**Please replace the Abstract** of the disclosure with the following abstract.

A technique for evaluating fraud risk in e-commerce transactions between consumer and a merchant is disclosed. The merchant requests service from the system using a secure, open messaging protocol. An e-commerce transaction or electronic purchase order is received from the merchant, the level of risk associated with each order is measured, and a risk score is returned. In one embodiment, data validation, highly predictive artificial intelligence pattern matching, network data aggregation and negative file checks are used. The system performs analysis including data integrity checks and correlation analyses based on characteristics of the transaction. Other analysis includes comparison of the current transaction against known fraudulent transactions, and a search of a transaction history database to identify abnormal patterns, name and address changes, and defrauders. In one alternative, scoring algorithms are refined through use of a closed-loop risk modeling process enabling the service to adapt to new or changing fraud patterns.

***Reasons for Allowance***

6. Claims 1, 4-21, 24-26, 28 and 30 are allowed.
7. The following is an examiner's statement of reasons for allowance of the aforementioned claims:

Art Unit: 3693

The claimed inventions pertain to evaluating fraud risk of an electronic commerce transaction.

The following references are deemed closest prior art of record.

Hillmer, U.S. Patent 6,714,918

Degen, U.S. Patent 6,418,436

Each of the closest prior is analyzed in context of the identified reasons for allowance as follows.

Claims 1 and dependent claims 4-21 and 28 recite that blending the model score value comprises "determining in which fraud risk zone, of two or more fraud risk zones, the boundaries of which are determined by the one or more merchant-specific threshold values, the model score value belongs; and applying a policy corresponding to the determined fraud risk zone, wherein the policy dictates a magnitude and an allowable direction of influence applied by a heuristic model and a statistical model." The closest references of Hillmer, and Degen alone or in combination fail to teach these features.

The claimed blending feature concerns overlaying of distribution of risk estimates observed for bad transactions on the distribution of risk estimates of good transactions to create one or more risk zones. For each of the zones, a blending policy is established and enforced. The blending policies are a function of both the nature of the risk estimation algorithms yielding the scores being blended as well as the nature of the risk zones themselves. For example, if a heuristic model risk estimate falls in risk zone 1, where most non-fraudulent transactions fall, then a statistical model is used to produce the final risk estimate. However, if the heuristic model risk estimate falls in a risk zone 4, where most fraudulent transactions fall, then the heuristic model is used to produce the risk estimate. In stark contrast, Hillmer is concerned with breaking a transaction down into its component parameters and applying a scheme for determining a final fraud score. The final fraud score is compared against a threshold to determine the likelihood of the transaction being fraudulent. Hillmer is completely silent about evaluating fraud risk in a manner that includes, inter alia, applying a heuristic model and a statistical model, the magnitude and direction of each, depending on in which risk zone a model score value

Art Unit: 3693

belonged. There would be no need in Hillmer to have the claimed feature as Hillmer already combines its first and second score to obtain a total fraud score.

Degen is concerned with scoring a match between applicant data provided by a client and data stored in a fraud database. The merchant application itself has a unique identifier portion, a non-unique identifier portion, and a reference portion. A processor having access to the merchant information calculates a first match score based on a match occurring in the non-unique portion, a second match score based on a match occurring in the unique identifier portion, and a third match score based on a match occurring in the reference portion. A total score is calculated by summing the first, second, and third scores. Degen is completely silent about at least evaluating fraud risk in a manner that includes, inter alia, applying a heuristic model and a statistical model, the magnitude and direction of each, depending on in which risk zone a model score value belonged. Further, Degen does not fairly suggest this claimed feature, because Degen has no need for the kind of blending that applicants disclose and claim.

8. Claims 24-26 and 30 are apparatus claims that correspond to claim 1 and therefore are deemed allowable for the same reasons as method claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

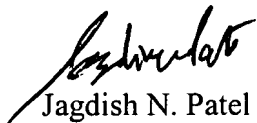
Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748. The examiner can normally be reached on **800AM-630PM Mon-Tue and Thu.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone

Art Unit: 3693

number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3693)

8/14/07